

Quarterly Progress Report

Project Title:	Survey of Driver Perceptions of Railroad and Light Rail Warning Devices/Grade Crossings - Year 2		
RFP Number: 2001-33	NJDOT Research Project Manager: Karl Brodtman		
Task Order Number/Study Number: NCTIP-33	Pincipal Investigator: Jeng, One-Jang		
Period Starting: 1/1/2002 - 12/31/2003 (Start-End Date of Study)	Period Ending: 09/02/2003		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Phase I-Literature Search: Conduct a literature search of the current state of the practice	10	100	100	10
Phase II-Research Approach: Task 1: Determine the various types of railroad and light rail highway grade crossings in New Jersey	5	100	100	5
Task 2: Conduct a survey of other states for information	10	100	100	10
Task 3a: Catalog the individual active and passive railroad/light rail crossing devices in New Jersey	5	10	100	5
Task 3b: Arrange the devices in groups that would be found at typical crossings as found in the classification system in Task 1	5	10	100	5
Task 4: Setup of laboratory experimental tasks, video and still image editing, programming for recording subject responses and data processing	15	20	100	15
Conduct a pilot study for the experiments; finalize experiment procedures	10	50	100	10
Conduct formal laboratory experiments	10	40	75	7.5
Perform data processing and statistical analysis for the laboratory experiments	10	5	5	0.5
Task 5: Technical Memorandum on the driver manual chapters, exam questions and answers	10	50	50	5
Task 6: Prepare and deliver the final report	10	0	0	0
Final Report				
TOTAL	100 %			73.0 %

1. Progress this quarter by task:

During the reported quarter, the research team of this project visited more railroad crossings at Morristown and Jersey City for additional signs (stop and yield signs) used at railroad crossings. First, the team identified sites where there are stop signs according a New Jersey railroad crossing database. Then the team members visited those sites. It was found that all the stop signs posted near the railroad crossings are not designed for railroad

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crossings but for roadways running parallel to the railroad tracks. Video recordings were taken on those sites. The research team did not find any yield sign posted near railroad crossings in all the sites been visited. Night time driving scenes were also videotaped from railroad crossings at North Brunswick.

The research team has recruited five truck drivers to participate in the laboratory experiment. It will also recruit five bus drivers to participate in the laboratory experiment. All the truck and bus drivers are from local industries and schools around Newark.

The contract agreement for appointing Dr. Srimi as a consultant has been materialized with the help of NJIT Office of Sponsored Programs. Currently Dr. Srimi is working on drafting a railroad crossing sections for all New Jersey driver's manuals.

2. Proposed activities for next quarter by task:

The research team will finish data collection for the laboratory experiment in the next quarter. Statistical analyses will be performed to learn from drivers' perspective what they perceive upon seeing various warning signs and traffic control devices. The information will be fed into the railroad crossing sections for all New Jersey driver's manuals. There will be a performance evaluation on driver's perception and understanding of warning signs and responses at railroad crossing comparing subjects who read the proposed railroad crossing section for the New Jersey driver's manual and those who read the current New Jersey driver's manual.

3. List of deliverables provided in this quarter by task (product date):

4. Progress on implementation and training activities:

5. Problems/proposed solutions:

6. Budget summary:

Total Project Budget (# Years)	2 Year	\$207,454.00
Total Project Expenditure to date		\$140,424.00
% of Total Project Budget Expended		67.69%
Task Order Number/ Study Number	2 Year	NCTIP-33
Current Task Order Budget (# of Years)		\$80,790.00
Actual Expenditure to Date Against Current Task Order		\$57,975.00
% of Current Task Order Budget Expended		71.76%